Appl. Serial No. 09/966,049 Amendment Dated November 11, 2005 Reply to Office Action of July 25, 2005

31876-0263

Amendments to the Specification

In the Abstract

Please replace the original Abstract with the following rewritten Abstract:

A software monitor runs during the simulation of a digital design to detect and report event combinations to a database for test coverage analysis. The disclosed invention is a grid that monitors a design simulation to support design verification coverage analysis. The monitor is a grid The disclosed invention that includes n ordered axis declarations 72 that each correspond to a functional attribute and list at least two valid functional states, logic expressions 78 that test for the functional states and set axis variables, and a grid declaration 80 that converts the axis variables to a unique linear index value corresponding to the cross-product of the achieved functional states and records hits. The linear index is calculated by multiplying the integer value of each axis variable (except the nth axis variable) by the product of the sizes of each higher-order axis than the axis to which said axis variable corresponds, summing the results, and adding the integer value of the nth said axis variable.